

Notice of Allowability

Application No.

10/625,830

Examiner

Richard A. Rosenberger

Applicant(s)

HOUSER, GLENN

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/03/2007.
2. ☒ The allowed claim(s) is/are 28-58.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

1. The following is an examiner's statement of reasons for allowance:
2. The declaration by Glenn Houser filed 3 January 2007 states that the underlying mathematical model for measuring thick objects and thin objects by the type of spectroscopic measurement technique disclosed and claimed here are different. In paragraph 6, the declaration states that, in the thick film range, "[r]educing the wavelength increment ... increases the thickness which may be measured", while, in the thin film range, "reducing the wavelength increment has the effect of slightly improving the accuracy due to better modeling...". Thus the declaration presents the results of that claimed small steps wavelength variation to be different from that of the prior art, not simply increasing the accuracy but actually allowing for the measurement of the thickness of a layer that could not be measured with larger steps.

Thus as presented in the declaration, the choice of wavelength step size is not, as in the prior art, the known matter of selecting for the desired accuracy, but a different, previously unrecognized, matter of allowing for the measurement of layers of the claimed thicknesses (1 to 1000 microns in the independent claims), which the declaration states, in paragraph 7, that "no practical method of high resolution, infrared spectroscopy existed".

All of the independent claims are directed to the measurement of objects with a thickness of 1 to 1000 nm; claim 28 calls for a wavelength step range of "less than 0.5 nm", and claims 37 and 49 both call for a wavelength step range of "less than one nanometer". As pointed out in the remarks, the cited reference to Li (6,392,756), although teaching the light source can be a tunable laser and a wavelength step range

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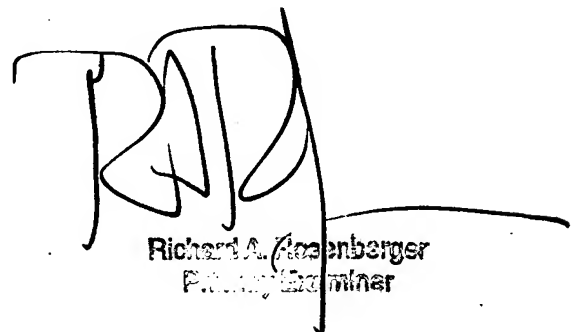
that is "typically" 1 nm, that reference teaches the use of such a system with thin layers (less than 100 Å). Given the statements in the declaration and the arguments in the remarks that there are differences between measuring thin layers and thick layers that resulted in those in the art not recognizing the application of such a system to the disclosed and thick layers, it appears that the claims are allowable over the cited art.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger
16 February 2007



Richard A. Rosenberger
Patent Examiner